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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/607,080	06/25/2003	Robert W. Allington	18-529-S-1	6542
23898	7590	02/10/2005	EXAMINER	
VINCENT L. CARNEY LAW OFFICE P.O. BOX 80836 LINCOLN, NE 68501-0836			THERKORN, ERNEST G	
			ART UNIT	PAPER NUMBER
			1723	
DATE MAILED: 02/10/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/607,080

Applicant(s)

ALLINGTON ET AL.

Examiner

Ernest G. Therkorn

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on January 14 and 18, 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 19-130 is/are pending in the application.
- 4a) Of the above claim(s) 19-93, 99, 100, 105-116, 118-121 and 127-130 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 94-98, 101-104, 117 and 122-126 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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Claims 95-97 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The specification does not appear to identify the first or second substance of claims 95-97. As such, the claims have not been described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claims 95-97 are rejected under 35 U.S.C. 112, first paragraph, because the best mode contemplated by the inventor has not been disclosed. The specification does not appear to identify the first or second substance of claims 95-97. As such, the best mode of the invention has not been set forth.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 94-98 and 101 are rejected under 35 U.S.C. 102(A and/or E) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over each of Zare (U.S. Patent Pub. 2003/0062309), Zare (U.S. Patent Pub. 2003/0062308), Zare (U.S. Patent Pub. 2003/0062310), and Zare (U.S. Patent Pub. 2003/0079257). The claims are considered to read on each of Zare (U.S. Patent Pub. 2003/0062309), Zare (U.S. Patent Pub. 2003/0062308), Zare (U.S. Patent Pub. 2003/0062310), and Zare (U.S. Patent Pub. 2003/0079257). However, if a difference exists between the claims and each of Zare (U.S. Patent Pub. 2003/0062309), Zare (U.S. Patent Pub. 2003/0062308), Zare (U.S. Patent Pub. 2003/0062310), and Zare (U.S. Patent Pub. 2003/0079257), it would reside in optimizing the steps of each of Zare (U.S. Patent Pub. 2003/0062309), Zare (U.S. Patent Pub. 2003/0062308), Zare (U.S. Patent Pub. 2003/0062310), and Zare (U.S. Patent Pub. 2003/0079257). It would have been obvious to optimize the steps of each of Zare (U.S. Patent Pub. 2003/0062309), Zare (U.S. Patent Pub. 2003/0062308), Zare (U.S. Patent Pub. 2003/0062310), and Zare (U.S. Patent Pub. 2003/0079257) to enhance separation.

Claims 95-97 are rejected under 35 U.S.C. 103(a) as being unpatentable over each of Zare (U.S. Patent Pub. 2003/0062309), Zare (U.S. Patent Pub. 2003/0062308), Zare (U.S. Patent Pub. 2003/0062310), and Zare (U.S. Patent Pub. 2003/0079257) in

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view of Ashley (U.S. Patent No. 5,137,659). At best, the claims differ from each of Zare (U.S. Patent Pub. 2003/0062309), Zare (U.S. Patent Pub. 2003/0062308), Zare (U.S. Patent Pub. 2003/0062310), and Zare (U.S. Patent Pub. 2003/0079257) in reciting use of a second substance that emits radiation. Ashley (U.S. Patent No. 5,137,659) (Abstract) discloses that it is well known to produce radiation of a second energy by using a first energy as a source of exciting radiation to interact with a second substance to produce a second radiation. It would have been obvious to use a second substance that emits radiation in each of Zare (U.S. Patent Pub. 2003/0062309), Zare (U.S. Patent Pub. 2003/0062308), Zare (U.S. Patent Pub. 2003/0062310), and Zare (U.S. Patent Pub. 2003/0079257) because Ashley (U.S. Patent No. 5,137,659) (Abstract) discloses that it is well known to produce radiation of a second energy by using a first energy as a source of exciting radiation to interact with a second substance to produce a second radiation.

Claims 102-104 are rejected under 35 U.S.C. 103(a) as being unpatentable over each of Zare (U.S. Patent Pub. 2003/0062309), Zare (U.S. Patent Pub. 2003/0062308), Zare (U.S. Patent Pub. 2003/0062310), and Zare (U.S. Patent Pub. 2003/0079257) as applied to claims 94-98 and 101 above, and further in view of Rose (U.S. Patent No. 5,200,150). At best, the claims differ from each of Zare (U.S. Patent Pub. 2003/0062309), Zare (U.S. Patent Pub. 2003/0062308), Zare (U.S. Patent Pub. 2003/0062310), and Zare (U.S. Patent Pub. 2003/0079257) in reciting use of x-rays. Rose (U.S. Patent No. 5,200,150) (column 8, lines 26-34) discloses that x-rays are an alternative form of energy to photoinitiation. It would have been obvious to use x-rays in

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each of Zare (U.S. Patent Pub. 2003/0062309), Zare (U.S. Patent Pub. 2003/0062308), Zare (U.S. Patent Pub. 2003/0062310), and Zare (U.S. Patent Pub. 2003/0079257) because Rose (U.S. Patent No. 5,200,150) (column 8, lines 26-34) discloses that x-rays are an alternative form of energy to photoinitiation.

Claims 103 and 104 are rejected under 35 U.S.C. 102(B) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Rose (U.S. Patent No. 5,200,150). The claims are considered to read on Rose (U.S. Patent No. 5,200,150). However, if a difference exists between the claims and Rose (U.S. Patent No. 5,200,150), it would reside in optimizing the steps of Rose (U.S. Patent No. 5,200,150). It would have been obvious to optimize the steps of Rose (U.S. Patent No. 5,200,150) to enhance separation.

Claims 117, 122, and 126 are rejected under 35 U.S.C. 103(a) as being unpatentable over each of Zare (U.S. Patent Pub. 2003/0062309), Zare (U.S. Patent Pub. 2003/0062308), Zare (U.S. Patent Pub. 2003/0062310), and Zare (U.S. Patent Pub. 2003/0079257) as applied to claims 94-98 and 101 above, and further in view of Good (U.S. Patent No. 3,808,125). At best, the claims differ from Zare (U.S. Patent Pub. 2003/0062309), Zare (U.S. Patent Pub. 2003/0062308), Zare (U.S. Patent Pub. 2003/0062310), and Zare (U.S. Patent Pub. 2003/0079257) in reciting crosslinking with divinylbenzene. Good (U.S. Patent No. 3,808,125) (column 11, lines 48-53) discloses use of divinylbenzene allows light crosslinking thereby improving dimensional stability. It would have been obvious to crosslink in Zare (U.S. Patent Pub. 2003/0062309), Zare (U.S. Patent Pub. 2003/0062308), Zare (U.S. Patent Pub. 2003/0062310), and Zare

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(U.S. Patent Pub. 2003/0079257) because Good (U.S. Patent No. 3,808,125) (column 11, lines 48-53) discloses use of divinylbenzene allows light crosslinking thereby improving dimensional stability.

Claims 123-125 are rejected under 35 U.S.C. 103(a) as being unpatentable over each of Zare (U.S. Patent Pub. 2003/0062309), Zare (U.S. Patent Pub. 2003/0062308), Zare (U.S. Patent Pub. 2003/0062310), and Zare (U.S. Patent Pub. 2003/0079257) as applied to claims 94-98 and 101 above, and further in view of Amos (U.S. Patent No. 2,537,951). At best, the claims differ from each of Zare (U.S. Patent Pub. 2003/0062309), Zare (U.S. Patent Pub. 2003/0062308), Zare (U.S. Patent Pub. 2003/0062310), and Zare (U.S. Patent Pub. 2003/0079257) in reciting applying pressure. Amos (U.S. Patent No. 2,537,951) (column 2, lines 32-51 and column 7, line 69-column 8, line 7) discloses that the amount of pressure applied during polymerization controls porosity and that pressure can be applied with a piston. It would have been obvious to apply pressure in each of Zare (U.S. Patent Pub. 2003/0062309), Zare (U.S. Patent Pub. 2003/0062308), Zare (U.S. Patent Pub. 2003/0062310), and Zare (U.S. Patent Pub. 2003/0079257) because Amos (U.S. Patent No. 2,537,951) (column 2, lines 32-51 and column 7, line 69-column 8, line 7) discloses that the amount of pressure applied during polymerization controls porosity and that pressure can be applied with a piston.

Claims 118-121 and 127-130 have been withdrawn from consideration as being drawn to non-elected species.

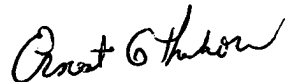
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The remarks urge that the examination of the additional inventions and species would not be an undue burden on the examiner. However, the additional search and different issues of patentability would be an enormous burden on the examiner. As such, the restriction and elections of species have been reconsidered, deemed proper, and made final for the reasons of record.

The foreign and literature references from the PTO-1149 of February 11, 2004 have not been cited because no copies of the references have been scanned into this file. No copies are present in parent case, Serial No. 10/180,350. It would be appreciated if applicant submitted copies of the foreign and literature references from the PTO-1149 of February 11, 2004.

Any inquiry concerning this communication should be directed to E. Therkorn at telephone number (571) 272-1149. The official fax number is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**Ernest G. Therkorn
Primary Examiner
Art Unit 1723**

EGT
February 8, 2005